Robert H Crabtree

List of Publications by Year
in descending order

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198 papers	27,496 citations	7096 78 h-index	5539 163 g-index
205 all docs	205 docs citations	205 times ranked	19805 citing authors

#	Article	IF	Citations
1	Dehydrogenation as a Substrate-Activating Strategy in Homogeneous Transition-Metal Catalysis. Chemical Reviews, 2010, 110, 681-703.	47.7	1,457
2	Definition of the hydrogen bond (IUPAC Recommendations 2011). Pure and Applied Chemistry, 2011, 83, 1637-1641.	1.9	1,449
3	The organometallic chemistry of alkanes. Chemical Reviews, 1985, 85, 245-269.	47.7	1,237
4	Molecular Catalysts for Water Oxidation. Chemical Reviews, 2015, 115, 12974-13005.	47.7	964
5	Redox-active ligands in catalysis. Chemical Society Reviews, 2013, 42, 1440-1459.	38.1	880
6	Defining the hydrogen bond: An account (IUPAC Technical Report). Pure and Applied Chemistry, 2011, 83, 1619-1636.	1.9	856
7	Iridium compounds in catalysis. Accounts of Chemical Research, 1979, 12, 331-337.	15.6	808
8	A Functional Model for O-O Bond Formation by the O2-Evolving Complex in Photosystem II. Science, 1999, 283, 1524-1527.	12.6	701
9	A New Intermolecular Interaction:â€‰ UnconventionalHydrogen Bonds with Elementâˆ’Hydride Bonds as ProtonAcceptor. Accounts of Chemical Research, 1996, 29, 348-354.	15.6	639
10	Resolving Heterogeneity Problems and Impurity Artifacts in Operationally Homogeneous Transition Metal Catalysts. Chemical Reviews, 2012, 112, 1536-1554.	47.7	576
11	Highly Active and Robust Cp* Iridium Complexes for Catalytic Water Oxidation. Journal of the American Chemical Society, 2009, 131, 8730-8731.	13.7	561
12	Rhodium and Iridium Complexes of N-Heterocyclic Carbenes via Transmetalation:Â Structure and Dynamics. Organometallics, 2003, 22, 1663-1667.	2.3	539
13	Half-Sandwich Iridium Complexes for Homogeneous Water-Oxidation Catalysis. Journal of the American Chemical Society, 2010, 132, 16017-16029.	13.7	507
14	Abnormal, mesoionic and remote N-heterocyclic carbene complexes. Coordination Chemistry Reviews, 2013, 257, 755-766.	18.8	501
15	Study of the Nâˆ’HÂ·Â·Â·Hâˆ’B Dihydrogen Bond Including the Crystal Structure of BH3NH3 by Neutron Diffraction. Journal of the American Chemical Society, 1999, 121, 6337-6343.	13.7	475
16	Homogeneous Transition Metal Catalysis of Acceptorless Dehydrogenative Alcohol Oxidation: Applications in Hydrogen Storage and to Heterocycle Synthesis. Chemical Reviews, 2017, 117, 9228-9246.	47.7	432
17	A Pd complex of a tridentate pincer CNC bis-carbene ligand as a robust homogenous Heck catalyst. Chemical Communications, 2001, , 201-202.	4.1	404
18	Secondary Coordination Sphere Interactions Facilitate the Insertion Step in an Iridium(III) CO₂ Reduction Catalyst. Journal of the American Chemical Society, 2011, 133, 9274-9277.	13.7	388

#	Article	IF	Citations
19	Key factors in pincer ligand design. Chemical Society Reviews, 2018, 47, 1959-1968.	38.1	364
20	Hydrogen storage in liquid organic heterocycles. Energy and Environmental Science, 2008, 1, 134.	30.8	348
21	Light-driven water oxidation for solar fuels. Coordination Chemistry Reviews, 2012, 256, 2503-2520.	18.8	337
22	Characterization of the O2-Evolving Reaction Catalyzed by [(terpy)(H2O)MnIII(O)2MnIV(OH2)(terpy)](NO3)3(terpy = 2,2â€˜:6,2â€˜Â â€˜-Terpyridine). Journal of the American Chemical Society, 2001, 123, 423-430.	13.7	336
23	Chelated Iridium(III) Bis-carbene Complexes as Air-Stable Catalysts for Transfer Hydrogenation. Organometallics, 2002, 21, 3596-3604.	2.3	315
24	Abnormal C5-Bound N-Heterocyclic Carbenes:Â Extremely Strong Electron Donor Ligands and Their Iridium(I) and Iridium(III) Complexes. Organometallics, 2004, 23, 2461-2468.	2.3	311
25	Mechanism of Câˆ'H Activation by Diiron Methane Monooxygenases:Â Quantum Chemical Studies. Journal of the American Chemical Society, 1997, 119, 3103-3113.	13.7	302
26	Iridium-Catalyzed Hydrogenation of N-Heterocyclic Compounds under Mild Conditions by an Outer-Sphere Pathway. Journal of the American Chemical Society, 2011, 133, 7547-7562.	13.7	296
27	Deactivation in Homogeneous Transition Metal Catalysis: Causes, Avoidance, and Cure. Chemical Reviews, 2015, 115, 127-150.	47.7	294
28	Distinguishing Homogeneous from Heterogeneous Catalysis in Electrode-Driven Water Oxidation with Molecular Iridium Complexes. Journal of the American Chemical Society, 2011, 133, 10473-10481.	13.7	293
29	Introduction: CH Activation. Chemical Reviews, 2017, 117, 8481-8482.	47.7	264
30	A visible light water-splitting cell with a photoanode formed by codeposition of a high-potential porphyrin and an iridium water-oxidation catalyst. Energy and Environmental Science, 2011, 4, 2389.	30.8	257
31	A molecular catalyst for water oxidation that binds to metal oxide surfaces. Nature Communications, 2015, 6, 6469.	12.8	256
32	Factors Affecting the Strength of N-H.cntdot..cntdot..cntdot.H-Ir Hydrogen Bonds. Journal of the American Chemical Society, 1995, 117, 3485-3491.	13.7	244
33	Computed Ligand Electronic Parameters from Quantum Chemistry and Their Relation to Tolman Parameters, Lever Parameters, and Hammett Constants. Inorganic Chemistry, 2001, 40, 5806-5811.	4.0	233
34	Multifunctional ligands in transition metal catalysis. New Journal of Chemistry, 2011, 35, 18-23.	2.8	229
35	Comparison of primary oxidants for water-oxidation catalysis. Chemical Society Reviews, 2013, 42, 2247-2252.	38.1	227
36	Anodic deposition of a robust iridium-based water-oxidation catalyst from organometallic precursors. Chemical Science, 2011, 2, 94-98.	7.4	219

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37	Coordination chemistry of halocarbons. Coordination Chemistry Reviews, 1990, 99, 89-115.	18.8	207
38	Efficient selective and atom economic catalytic conversion of glycerol to lactic acid. Nature Communications, 2014, 5, 5084.	12.8	207
39	Reactivity Differences in the Syntheses of Chelating N-Heterocyclic Carbene Complexes of Rhodium Are Ascribed to Ligand Anisotropy. Organometallics, 2004, 23, 1253-1263.	2.3	199
40	Precursor Transformation during Molecular Oxidation Catalysis with Organometallic Iridium Complexes. Journal of the American Chemical Society, 2013, 135, 10837-10851.	13.7	193
41	Anchoring groups for photocatalytic water oxidation on metal oxide surfaces. Chemical Society Reviews, 2017, 46, 6099-6110.	38.1	189
42	Oxidative Synthesis of Amides and Pyrroles via Dehydrogenative Alcohol Oxidation by Ruthenium Diphosphine Diamine Complexes. Organometallics, 2011, 30, 4174-4179.	2.3	180
43	Mechanism of Hâˆ'H Activation by Nickelâˆ'Iron Hydrogenase. Journal of the American Chemical Society, 1998, 120, 548-555.	13.7	173
44	Dihydrogen Complexation. Chemical Reviews, 2016, 116, 8750-8769.	47.7	170
45	Computational structureâ€"activity relationships in H2storage: how placement of N atoms affects release temperatures in organic liquid storage materials. Chemical Communications, 2007, , 2231-2233.	4.1	163
46	Outer sphere hydrogenation catalysis. New Journal of Chemistry, 2013, 37, 21-27.	2.8	161
47	Iridium-based complexes for water oxidation. Dalton Transactions, 2015, 44, 12452-12472.	3.3	156
48	Acetylacetonate Anchors for Robust Functionalization of TiO₂Nanoparticles with Mn(II)âˆ'Terpyridine Complexes. Journal of the American Chemical Society, 2008, 130, 14329-14338.	13.7	151
49	Particle Formation during Oxidation Catalysis with Cp* Iridium Complexes. Journal of the American Chemical Society, 2012, 134, 9785-9795.	13.7	150
50	Mechanism of Homogeneous Iridium-Catalyzed Alkylation of Amines with Alcohols from a DFT Study. Organometallics, 2008, 27, 2529-2535.	2.3	149
51	Electrocatalytic Water Oxidation by a Copper(II) Complex of an Oxidation-Resistant Ligand. ACS Catalysis, 2017, 7, 3384-3387.	11.2	149
52	Methanol Dehydrogenation by Iridium N-Heterocyclic Carbene Complexes. Inorganic Chemistry, 2015, 54, 5079-5084.	4.0	146
53	Modeling the Solvent Sphere:Â Mechanism of the Shilov Reaction. Journal of the American Chemical Society, 1996, 118, 4442-4450.	13.7	145
54	Reduction of Systematic Uncertainty in DFT Redox Potentials of Transition-Metal Complexes. Journal of Physical Chemistry C, 2012, 116, 6349-6356.	3.1	145

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55	Dimer-of-Dimers Model for the Oxygen-Evolving Complex of Photosystem II. Synthesis and Properties of [MnIV4O5(terpy)4(H2O)2](ClO4)6. Journal of the American Chemical Society, 2004, 126, 7345-7349.	13.7	127
56	Axially Chiral Bidentate N-Heterocyclic Carbene Ligands Derived from BINAM:Â Rhodium and Iridium Complexes in Asymmetric Ketone Hydrosilylation. Organometallics, 2005, 24, 4432-4436.	2.3	127
57	An Iridium(IV) Species, [Cp*Ir(NHC)Cl]⁺, Related to a Water-Oxidation Catalyst. Organometallics, 2011, 30, 965-973.	2.3	127
58	Interplay of Linker,N-Substituent, and Counterion Effects in the Formation and Geometrical Distortion ofN-Heterocyclic Biscarbene Complexes of Rhodium(I). Organometallics, 2006, 25, 6099-6107.	2.3	124
59	Catalysed low temperature H2 release from nitrogen heterocycles. New Journal of Chemistry, 2006, 30, 1675.	2.8	121
60	Cp* Iridium Complexes Give Catalytic Alkane Hydroxylation with Retention of Stereochemistry. Journal of the American Chemical Society, 2010, 132, 12550-12551.	13.7	106
61	Electrochemical Activation of Cp* Iridium Complexes for Electrode-Driven Water-Oxidation Catalysis. Journal of the American Chemical Society, 2014, 136, 13826-13834.	13.7	105
62	An Experimentalâ˘Theoretical Study of the Factors That Affect the Switch between Ruthenium-Catalyzed Dehydrogenative Amide Formation versus Amine Alkylation. Organometallics, 2010, 29, 6548-6558.	2.3	103
63	Hydroxamate Anchors for Improved Photoconversion in Dye-Sensitized Solar Cells. Inorganic Chemistry, 2013, 52, 6752-6764.	4.0	102
64	Water-stable, hydroxamate anchors for functionalization of TiO2 surfaces with ultrafast interfacial electron transfer. Energy and Environmental Science, 2010, 3, 917.	30.8	99
65	Proton-coupled electron transfer in manganese complex [(bpy)2Mn(O)2Mn(bpy)2]3+. Journal of the American Chemical Society, 1989, 111, 9249-9250.	13.7	98
66	Nitrogen Fixation by Nitrogenases:â€‰ A Quantum Chemical Study. Journal of Physical Chemistry B, 1998, 102, 1615-1623.	2.6	97
67	Hypervalency, secondary bonding and hydrogen bonding: siblings under the skin. Chemical Society Reviews, 2017, 46, 1720-1729.	38.1	96
68	Homogeneous tungsten, rhenium, and iridium catalysts in alkane dehydrogenation driven by reflux of substrate or of cosolvent or by inert-gas flow. Organometallics, 1993, 12, 294-298.	2.3	94
69	Bioinorganic Chemistry of Manganese Related to Photosynthetic Oxygen Evolution. Progress in Inorganic Chemistry, 0, , 99-142.	3.0	94
70	Hydroxamate anchors for water-stable attachment to TiO2 nanoparticles. Energy and Environmental Science, 2009, 2, 1173.	30.8	91
71	Modular Assembly of High-Potential Zinc Porphyrin Photosensitizers Attached to TiO₂ with a Series of Anchoring Groups. Journal of Physical Chemistry C, 2013, 117, 14526-14533.	3.1	90
72	Nitrogen-Containing Liquid Organic Hydrogen Carriers: Progress and Prospects. ACS Sustainable Chemistry and Engineering, 2017, 5, 4491-4498.	6.7	89

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73	A tridentate Ni pincer for aqueous electrocatalytic hydrogen production. New Journal of Chemistry, 2012, 36, 1149.	2.8	88
74	Sodium Periodate as a Primary Oxidant for Water-Oxidation Catalysts. Inorganic Chemistry, 2012, 51, 6147-6152.	4.0	86
75	Selective conversion of glycerol to lactic acid with iron pincer precatalysts. Chemical Communications, 2015, 51, 16201-16204.	4.1	86
76	Outer sphere anion participation can modify the mechanism for conformer interconversion in Pd pincer complexes. Dalton Transactions, 2003, , 831-838.	3.3	84
77	A Pyridine Alkoxide Chelate Ligand That Promotes Both Unusually High Oxidation States and Water-Oxidation Catalysis. Accounts of Chemical Research, 2017, 50, 952-959.	15.6	84
78	Counter-ion effects switch ligand binding from C-2 to C-5 in kinetic carbenes formed from an imidazolium salt and IrH5(PPh3)2. Chemical Communications, 2002, , 2580-2581.	4.1	82
79	Ultrafast Photooxidation of Mn(II)â^'Terpyridine Complexes Covalently Attached to TiO₂ Nanoparticles. Journal of Physical Chemistry C, 2007, 111, 11982-11990.	3.1	82
80	Cp* Iridium Precatalysts for Selective Câ€"H Oxidation via Direct Oxygen Insertion: A Joint Experimental/Computational Study. ACS Catalysis, 2012, 2, 208-218.	11.2	82
81	Deposition of an oxomanganese water oxidation catalyst on TiO2 nanoparticles: computational modeling, assembly and characterization. Energy and Environmental Science, 2009, 2, 230.	30.8	80
82	Heterogenized Iridium Water-Oxidation Catalyst from a Silatrane Precursor. ACS Catalysis, 2016, 6, 5371-5377.	11.2	79
83	Stabilization of iridium(I), -(III), and -(V) in an oxygen-donor ligand environment and the selective dehydrogenative silylation and hydrosilylation of ethylene with {C(Ph2P:O)3}Ir(ol)2. Organometallics, 1991, 10, 415-418.	2.3	74
84	High-Frequency EPR Study of a New Mononuclear Manganese(III) Complex:Â [(terpy)Mn(N3)3] (terpy =) Tj ETQq0 0 0 rgBT /Overlock 10	4.0	74
85	Rapid screening and combinatorial methods in homogeneous organometallic catalysis. Pure and Applied Chemistry, 2001, 73, 119-128.	1.9	74
86	Hydrogen transfer in the presence of amino acid radicals. Theoretical Chemistry Accounts, 1997, 97, 289-300.	1.4	71
87	A Quantum Chemical Study of the Mechanism of Tyrosinase. Journal of Physical Chemistry B, 1999, 103, 1193-1202.	2.6	71
88	Electronic and Steric Effects in the Insertion of Alkynes into an Iridium(III) Hydride. Organometallics, 2005, 24, 62-76.	2.3	71
89	Iridium catalyzed reversible dehydrogenation â€" Hydrogenation of quinoline derivatives under mild conditions. Journal of Organometallic Chemistry, 2015, 792, 184-189.	1.8	71
90	Ion pairing effects in intramolecular heterolytic H2 activation in an Ir(iii) complex: a combined theoretical/experimental study. New Journal of Chemistry, 2003, 27, 80-87.	2.8	69

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91	Bioinspired High-Potential Porphyrin Photoanodes. Journal of Physical Chemistry C, 2012, 116, 4892-4902.	3.1	69
92	Catalyst Activation by Loss of Cyclopentadienyl Ligands in Hydrogen Transfer Catalysis with Cp*Ir^{III} Complexes. ACS Catalysis, 2014, 4, 973-985.	11.2	68
93	An Efficient Synthesis of [Ir(cod)Cl]₂and Its Reaction with PMe₂Ph to Give<i>FAC</i>-[IrH(PMe₂C₆H₄)(PMe₂Ph)₃]. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 1982, 12, 407-413.	1.8	65
94	Solution Structures of Highly Active Molecular Ir Water-Oxidation Catalysts from Density Functional Theory Combined with High-Energy X-ray Scattering and EXAFS Spectroscopy. Journal of the American Chemical Society, 2016, 138, 5511-5514.	13.7	63
95	Effects of a Nonligating Pendant Hydrogen-Bonding Group in a Metal Complex:Â Stabilization of an HF Complex. Organometallics, 1999, 18, 1615-1621.	2.3	60
96	Cp* Iridium Precatalysts for Selective Câ€"H Oxidation with Sodium Periodate As the Terminal Oxidant. Organometallics, 2013, 32, 957-965.	2.3	60
97	Electrocatalytic Nitrogen Fixation for Distributed Fertilizer Production?. ACS Sustainable Chemistry and Engineering, 2016, 4, 5855-5858.	6.7	59
98	Efficiency of Interfacial Electron Transfer from Zn-Porphyrin Dyes into TiO₂ Correlated to the Linker Single Molecule Conductance. Journal of Physical Chemistry C, 2013, 117, 24462-24470.	3.1	55
99	Electron Injection Dynamics from Photoexcited Porphyrin Dyes into SnO2 and TiO2 Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 21662-21670.	3.1	54
100	Selective catalytic oxidation of sugar alcohols to lactic acid. Green Chemistry, 2015, 17, 594-600.	9.0	52
101	Stable Iridium(IV) Complexes of an Oxidation-Resistant Pyridine-Alkoxide Ligand: Highly Divergent Redox Properties Depending on the Isomeric Form Adopted. Journal of the American Chemical Society, 2015, 137, 7243-7250.	13.7	51
102	Antimony Complexes for Electrocatalysis: Activity of a Mainâ€Group Element in Proton Reduction. Angewandte Chemie - International Edition, 2017, 56, 9111-9115.	13.8	51
103	CHEMISTRY: A New Oxidation State for Pd?. Science, 2002, 295, 288-289.	12.6	50
104	Acyl Protection Strategy for Synthesis of a Protic NHC Complex via N-Acyl Methanolysis. Organometallics, 2010, 29, 5728-5731.	2.3	50
105	Cycloiridation of Î±,Î²-Unsaturated Ketones, Esters, and Acetophenone. Organometallics, 2005, 24, 4810-4815.	2.3	46
106	The mechanism of the Ni-Fe hydrogenases: a quantum chemical perspective. Journal of Biological Inorganic Chemistry, 2001, 6, 460-466.	2.6	45
107	Stoichiometric Câˆ'C Coupling Reactions in the Coordination Sphere of an Iridium(III) Alkyl. Organometallics, 2004, 23, 3378-3387.	2.3	45
108	Redox Activity of Oxo-Bridged Iridium Dimers in an N,O-Donor Environment: Characterization of Remarkably Stable Ir(IV,V) Complexes. Journal of the American Chemical Society, 2017, 139, 9672-9683.	13.7	45

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109	Seven-Coordinate Iridium(V) Polyhydrides with Chelating Bis(silyl) Ligands. Inorganic Chemistry, 1995, 34, 2937-2941.	4.0	42
110	Probing the Viability of Oxo-Coupling Pathways in Iridium-Catalyzed Oxygen Evolution. Organometallics, 2013, 32, 5384-5390.	2.3	42
111	Experimental and computational studies of borohydride catalyzed hydrosilylation of a variety of Cî€O and Cî€N functionalities including esters, amides and heteroarenes. New Journal of Chemistry, 2014, 38, 1694-1700.	2.8	42
112	A Carbeneâ€Rich but Carbonylâ€Poor [Ir₆(IMe)₈(CO)₂H₁₄]²⁺ Polyhydride Cluster as a Deactivation Product from Catalytic Glycerol Dehydrogenation. Angewandte Chemie - International Edition, 2014, 53, 12808-12811.	13.8	42
113	High Oxidation State Iridium Mono-Î¼-oxo Dimers Related to Water Oxidation Catalysis. Journal of the American Chemical Society, 2016, 138, 15917-15926.	13.7	41
114	Intramolecular Oxygen Transfer from Nitro Groups to Câ‹®C Bonds Mediated by Iridium Hydrides. Organometallics, 2005, 24, 3066-3073.	2.3	40
115	<i>Operando</i> Structureâ€“Activityâ€“Stability Relationship of Iridium Oxides during the Oxygen Evolution Reaction. ACS Catalysis, 2022, 12, 5174-5184.	11.2	40
116	Transfer Hydrogenation with Glycerol as H-Donor: Catalyst Activation, Deactivation and Homogeneity. ACS Sustainable Chemistry and Engineering, 2019, 7, 15845-15853.	6.7	38
117	An Î·2-vinyl pathway may explain net trans hydrosilylation via transition metal catalysis even in cyclic cases. New Journal of Chemistry, 2003, 27, 771-772.	2.8	37
118	Water-Nucleophilic Attack Mechanism for the Cu^{II}(pyalk)₂ Water-Oxidation Catalyst. ACS Catalysis, 2018, 8, 7952-7960.	11.2	37
119	Atom economic synthesis of amides via transition metal catalyzed rearrangement of oxaziridines. Green Chemistry, 2007, 9, 976.	9.0	36
120	Strongly Coupled Phenazineâ€“Porphyrin Dyads: Light-Harvesting Molecular Assemblies with Broad Absorption Coverage. ACS Applied Materials & Interfaces, 2019, 11, 8000-8008.	8.0	36
121	Fuel selection for a regenerative organic fuel cell/flow battery: thermodynamic considerations. Energy and Environmental Science, 2012, 5, 9534.	30.8	35
122	The stability of organometallic ligands in oxidation catalysis. Journal of Organometallic Chemistry, 2014, 751, 174-180.	1.8	34
123	Computational Design of Intrinsic Molecular Rectifiers Based on Asymmetric Functionalization of <i>N</i>-Phenylbenzamide. Journal of Chemical Theory and Computation, 2015, 11, 5888-5896.	5.3	34
124	Optimization of Photoanodes for Photocatalytic Water Oxidation by Combining a Heterogenized Iridium Waterâ€Oxidation Catalyst with a Highâ€Potential Porphyrin Photosensitizer. ChemSusChem, 2017, 10, 4526-4534.	6.8	34
125	Controlling the rectification properties of molecular junctions through moleculeâ€“electrode coupling. Nanoscale, 2016, 8, 16357-16362.	5.6	33
126	Catalytic Photodefluorination of Perfluoroalkanes to Perfluoroalkenes with a Ferrocene Photosensitizer. Organometallics, 1998, 17, 1582-1586.	2.3	32

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127	A full set of iridium(<scp>iv</scp>) pyridine-alkoxide stereoisomers: highly geometry-dependent redox properties. Chemical Science, 2017, 8, 1642-1652.	7.4	32
128	Amination of Methane and Ethane by Mercury Photosensitization in the Presence of Ammonia. Angewandte Chemie International Edition in English, 1993, 32, 1491-1492.	4.4	31
129	Direct Interfacial Electron Transfer from High-Potential Porphyrins into Semiconductor Surfaces: A Comparison of Linkers and Anchoring Groups. Journal of Physical Chemistry C, 2018, 122, 13529-13539.	3.1	31
130	Surface-Attached Molecular Catalysts on Visible-Light-Absorbing Semiconductors: Opportunities and Challenges for a Stable Hybrid Water-Splitting Photoanode. ACS Energy Letters, 2020, 5, 3195-3202.	17.4	31
131	Electrocatalytic, Homogeneous Ammonia Oxidation in Water to Nitrate and Nitrite with a Copper Complex. Journal of the American Chemical Society, 2022, 144, 8449-8453.	13.7	31
132	Molecular titaniumâ€“hydroxamate complexes as models for TiO₂ surface binding. Chemical Communications, 2016, 52, 2972-2975.	4.1	30
133	Creating Ligands with Multiple Personalities. Science, 2010, 330, 455-456.	12.6	29
134	Towards multielectron photocatalysis: a porphyrin array for lateral hole transfer and capture on a metal oxide surface. Physical Chemistry Chemical Physics, 2015, 17, 12728-12734.	2.8	29
135	The preparation, properties and some catalytic reactions of mer-hydrido(tetrahydroborato)tris(methyldiphenylphosphine)ruthenium(II) and some related complexes. Journal of Organometallic Chemistry, 1978, 157, 335-344.	1.8	28
136	Origin of Solvent Acceleration in Organolithium Metalâˆ’Halogen Exchange Reactions. Organometallics, 1997, 16, 6021-6023.	2.3	28
137	High-Potential Porphyrins Supported on SnO₂ and TiO₂ Surfaces for Photoelectrochemical Applications. Journal of Physical Chemistry C, 2016, 120, 28971-28982.	3.1	28
138	New Ir Bis-Carbonyl Precursor for Water Oxidation Catalysis. Inorganic Chemistry, 2016, 55, 2427-2435.	4.0	28
139	Unusual Stability of a Bacteriochlorin Electrocatalyst under Reductive Conditions. A Case Study on CO₂ Conversion to CO. ACS Catalysis, 2018, 8, 10131-10136.	11.2	28
140	Silatrane Anchors for Metal Oxide Surfaces: Optimization for Potential Photocatalytic and Electrocatalytic Applications. ACS Applied Materials & Interfaces, 2019, 11, 5602-5609.	8.0	28
141	A Stable Coordination Complex of Rh(IV) in an N,O-Donor Environment. Journal of the American Chemical Society, 2015, 137, 15692-15695.	13.7	27
142	Synthesis and Characterization of Iridium(V) Coordination Complexes With an N,Oâ€Donor Organic Ligand. Angewandte Chemie - International Edition, 2017, 56, 13047-13051.	13.8	24
143	Metal-free amidation of ether sp3 Câ€“H bonds with sulfonamides using PhI(OAc)2. RSC Advances, 2014, 4, 47951-47957.	3.6	23
144	Eine ungewÃ¶hnliche intermolekulare Dreizentrenâ€Nâ€H âƒ›H₂Reâ€Wasserstoffbrà¼cke zwischen [ReH₅(PPh₃)₃] und Indol im Kristall. Angewandte Chemie, 1995, 107, 2711-2713.	2.0	22

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145	Molecular design of light-harvesting photosensitizers: effect of varied linker conjugation on interfacial electron transfer. Physical Chemistry Chemical Physics, 2016, 18, 18678-18682.	2.8	21
146	Linker Rectifiers for Covalent Attachment of Transitionâ€Metal Catalysts to Metalâ€Oxide Surfaces. ChemPhysChem, 2014, 15, 1138-1147.	2.1	20
147	Gel-assisted crystallization of [Ir₄(IMe)₇(CO)H₁₀]²⁺ and [Ir₄(IMe)₈H₉]³⁺ clusters derived from catalytic glycerol dehydrogenation. Dalton Transactions, 2015, 44, 18403-18410.	3.3	20
148	Catalytic Oxygen Evolution from Manganese Complexes with an Oxidationâ€Resistant N,N,Oâ€Donor Ligand. ChemPlusChem, 2016, 81, 1129-1132.	2.8	18
149	Symmetrical Hydrogen Bonds in Iridium(III) Alkoxides with Relevance to Outer Sphere Hydrogen Transfer. Inorganic Chemistry, 2012, 51, 12313-12323.	4.0	17
150	Electron-Rich CpIr(biphenyl-2,2â€²-diyl) Complexes with Ï€-Accepting Carbon Donor Ligands. Organometallics, 2012, 31, 7158-7164.	2.3	17
151	A Dinuclear Iridium(V,V) Oxo-Bridged Complex Characterized Using a Bulk Electrolysis Technique for Crystallizing Highly Oxidizing Compounds. Inorganic Chemistry, 2018, 57, 5684-5691.	4.0	17
152	Syntheses, 2007, , 173-176.	0.3	16
153	Preparation of Halogenated Fluorescent Diaminophenazine Building Blocks. Journal of Organic Chemistry, 2015, 80, 9881-9888.	3.2	14
154	Activation, Deactivation and Reversibility in a Series of Homogeneous Iridium Dehydrogenation Catalysts. Israel Journal of Chemistry, 2017, 57, 937-944.	2.3	14
155	Concerted proton-electron transfer oxidation of phenols and hydrocarbons by a high-valent nickel complex. Chemical Science, 2020, 11, 1683-1690.	7.4	14
156	A heterogeneous water oxidation catalyst from dicobalt octacarbonyl and 1,2-bis(diphenylphosphino)ethane. New Journal of Chemistry, 2014, 38, 1540.	2.8	13
157	Linker Length-Dependent Electron-Injection Dynamics of Trimesitylporphyrins on SnO₂ Films. Journal of Physical Chemistry C, 2017, 121, 22690-22699.	3.1	13
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